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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,006	04/08/2004	Geoffrey Staines	17443	9318
	7590 04/10/200 FT MURPHY & PRES	EXAMINER		
400 GARDEN		RUTLAND WALLIS, MICHAEL		
SUITE 300 GARDEN CITY, NY 11530			ART UNIT	PAPER NUMBER
			2836	
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MONTHS		04/10/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)			
	10/821,006	STAINES ET AL.			
Office Action Summary	Examiner	Art Unit			
	Michael Rutland-Wallis	2836			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will. Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 6(a). In no event, however, may a reply be timil apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	l. lely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
 1) Responsive to communication(s) filed on <u>02/01/2007</u>. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i>, 1935 C.D. 11, 453 O.G. 213. 					
Disposition of Claims					
4) Claim(s) 1 and 4-7 is/are pending in the application 4a) Of the above claim(s) is/are withdraw 5) Claim(s) is/are allowed. 6) Claim(s) 1 and 4-7 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or	n from consideration.				
Application Papers					
9) The specification is objected to by the Examiner 10) The drawing(s) filed on <u>08 April 2004</u> is/are: a) Applicant may not request that any objection to the of Replacement drawing sheet(s) including the correction 11) The oath or declaration is objected to by the Examiner	☑ accepted or b) ☐ objected to be drawing(s) be held in abeyance. See on is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	nte			

DETAILED ACTION

Response to Arguments

In view of Applicant's remarks Applicant's proposed drawing amendment are not deemed necessary. Accordingly the objection is withdrawn.

Applicant has filed replacement drawings (03/21/2007) in response to a Notice of Non-Compliance (37 CFR 1.121); additionally these drawings are entered, and obviate the previous objected matter.

Applicant's amendments to claims to at least claim 1 render moot the previously identified claim objections.

Applicant's arguments filed 03/21/2007 have been fully considered but they are not persuasive.

Applicant alleges on last paragraph of the page labeled –6- "...claim 1, which more closely defines the common disc-shaped pole bus bar (15), the common disc-shaped ground bus bar (14) and the common disc-shaped charging bus bar (18)." The Office notes the "disc-shape" of the bus bars mentioned above is not present in claim 1. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Additionally O'Loughlin et al. (U.S. Pat. No. 5,567,995) teaches a known pulse generator, and while one should note several differences in O'Loughlin et al. and Applicant's arrangements, O'Loughlin et al. teaches spiral (disc-

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shape) configuration of a pulse forming network may be used to reduce at least weight, size, and costs of a conventionally arranged system.

Applicant secondly contends a lacking of a series inductor previously contained within claim 2 and charge storage means previously in claim 3 amended into claim 1. It is submitted Robinson as identified in the previous action teaches all the limitations of claims 2 and 3 as modified by Croson. Specifically, see page 2 of Applicant's specification where Applicant recites "That inductor which can simply be in the form of a coaxial cable" Robinson clearly identifies the use of a coaxial cable (item 7 and/or 8) and charge storage means see pulse forming line (item 12). It is therefore submitted the rejection is proper and is maintained.

Claim Objections

Claims 5-7 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Applicant is required to cancel the claims, or amend the claims to place the claims in proper dependent form, or rewrite the claims in independent form including the necessary fee.

In order to further prosecute the merits of Applicant's amendment claim 5 will treated to depend from claim 4.

Claim Rejections - 35 USC § 103

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 and 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson et al. (U.S. Pat. No. 5,412,254) in view of Croson (U.S. Pat. No. 3,748,528)

With respect to claim 1 Robinson teaches high voltage pulse generator (Fig. 1) with a charge storage means (item 12) and an untriggered discharge spark gap (item 27) connected in series therewith, characterized in that a plurality (seen in Fig. 1) of such series circuits of said charge storage means and said spark gap are connected in parallel with each other, with the connection of an antenna (not shown see col. 3 line 25) to a common pole bus bar (common connection to power supply lines seen in figure 1) of the charge storage means. Robinson illustrates only cabling and dielectric medium in connection to the charge storage means and the spark gap and while Robinson does not point out a specific resistor element for the charging of the pulse both the dielectric and the conductive line posses resistance to enable the charging of the pulse further the use of a separate resistor would have obvious to one of ordinary skill at the time of the invention to select a resistance of the line or dielectric or include a resistor in order to charge the system to a particular level before discharge. Robinson teaches a series inductor (inductance of transmission line item 30 alternatively

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inductance of attached antenna also see coaxial cable 7 and 8 coupled to the spark gap) is connected in the common discharge circuit (i.e. antenna not shown) of all charge storage means (12) between the end of the charge storage means (12) which is remote from the spark gap (27) and the end of the spark gap (27), which is remote from the charge storage means (12). Robinson teaches the charge storage means (12) are connected in single-pole mode to a common pole bus bar (power supply to supply charging potential), the spark gaps (27) are connected in single-pole mode to a common ground bus bar (output bus via transmission line 30 through grounded container col. 3 lines 25-30 where power may be combined col. 3. lines 53-54) and the charging resistance is connected in single-pole mode to a common charging bus bar (transformer arrangement of figure 1). Robinson is silent to disclose the antenna (not shown see col. 3 line 25) is used in the generation of microwaves. Croson teaches the connection of high power microwave generator (Fig. 1) in connection with charging circuitry (item 47) to a high voltage source (item 46) to supply power to a microwave generation system. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the high voltage source disclosed in Robinson to output to a microwave antenna in order to generate a high voltage pulse to produce power the microwave generation system.

With respect to claim 4 Robinson as modified by Croson teaches the charging resistances (identified above) are jointly connectable in single-pole mode to a high voltage generator (item 1).

With respect to claim 5 Robinson as modified by Croson schematically depict the bus bars and connection and describe connections such as a cylindrical shaped coaxial cable, the construction of a disc shape bus would have been obvious to one of to one of ordinary skill in the art at time of the invention to make a connection or bus in any suitable shape in order to meet spatial or conductive system specifications.

With respect to claim 6 Croson teaches the antenna is connected to the bus bar by way of a ducting means (shown in Fig .1 of Croson).

With respect to claim 7 Robinson as modified by Croson teaches charging resistors which are arranged colinearly with the charge storage means and the spark gaps thereof and which are connected to the charging bus bar are connected through holes (item 24) in the bus to the connecting points of the charge storage means associated therewith to the spark gaps.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Rutland-Wallis whose telephone number is 571-272-5921. The examiner can normally be reached on Monday-Thursday 7:30AM-6:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on 571-272-2058. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MRW

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SUPERVISORY PATENT EXAMINER
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